

DETAILED ACTION

Response to Amendment and Supplemental Amendment

Disposition of Claims

- I. Claims 1-8 are pending in the application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- II. Claims 1-3 and 7-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Raitola et al. (US 6,317,418 B1).

Regarding claim 1 Raitola teaches a method for assigning channels for radio transmission between a single subscriber station and a base station of a radio communication system for transmission of data in a predefined direction (see col. 5, lines 20-23 and col. 11, lines 7-10, the subscriber terminal reads on single subscriber station). Raitola teaches assigning a plurality of channel resources to the single subscriber station for the predefined transmission direction via a common channel description (see col. 10, line 67 and col. 11, lines 1-3, assigning which transmission units to transmit and which TCH the subscriber can transmit on reads on assigning a plurality of channel resources and the order channel reads on common channel description). Raitola teaches the plurality of channel resources each having at least one of different spread-

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spectrum codes, different code groups, different frequencies and different midambles (see col. 11, lines 1-3, transmission units (channel resources) in CDMA systems can be a period with one or more spreading codes and in FDMA systems can be a period with one or more frequencies, this reads on at least one of different spread-spectrum codes, different code groups, different frequencies and different midambles as claimed (see col. 5, lines 7-10)). Raitola teaches the common channel description comprises information about utilization of the channel resources by the single subscriber station during the radio transmission (see col. 11, lines 1-3, describing which transmission units to transmit and on which channel to transmit them reads on utilization of channel resources). Raitola teaches specifying an order of the transmission of data for the predefined transmission direction (see col. 11, lines 1-3, specifying which transmission units to transmit reads on specifying an order of the transmission of data under the broadest reasonable interpretation of the term "order"). Raitola teaches transmitting the common channel description to the subscriber station (see col. 10, line 67 and col. 11, lines 1-3).

Regarding claim 2 Raitola teaches utilization of channel resources that is specified by the order of the information on each of the channel resources within the channel description (see col. 11, lines 1-3).

Regarding claim 3 Raitola teaches the order of the utilization of channel resources is specified by information relating to at least one of timeslots assigned, to spread-spectrum codes, and to assigned frequencies (see col. 5, lines 5-10 and col. 11, lines 1-3).

Regarding claim 7 Raitola teaches wherein a case where one channel is changed, the description of this channel is sent (see col. 11, lines 1-3 and col. 12, lines 1-3).

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Regarding claim 8 Raitola teaches a base station for a radio communication system comprising a facility to assign channels for a radio transmission with one subscriber station for one transmission direction (see col. 5, lines 20-23 and col. 11, lines 7-10, the subscriber terminal reads on one subscriber station). Raitola teaches wherein the facility is operable to generate and transmit a common channel description to the one subscriber station, wherein the common channel description comprises data assigning a plurality of channel resources for the radio transmission (see col. 10, line 67 and col. 11, lines 1-3, assigning which transmission units to transmit and which TCH the subscriber can transmit on reads on assigning a plurality of channel resources and the order channel reads on common channel description). Raitola teaches the channel resources have at least one of different spread-spectrum codes, different code groups, different frequencies and different midambles (see col. 11, lines 1-3, transmission units (channel resources) in CDMA systems can be a period with one or more spreading codes and in FDMA systems can be a period with one or more frequencies, this reads on at least one of different spread-spectrum codes, different code groups, different frequencies and different midambles as claimed (see col. 5, lines 7-10). Raitola teaches the common channel description comprises information about utilization of the channel resources by the single subscriber station during the radio transmission (see col. 11, lines 1-3, describing which transmission units to transmit and on which channel to transmit them reads on utilization of channel resources). Raitola teaches specifying an order of the transmission of data for the predefined transmission direction (see col. 11, lines 1-3, specifying which transmission units to transmit reads on specifying an order of the transmission of data under the broadest reasonable interpretation of the term "order").

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

III. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raitola et al. (US 6,317,418 B1) in view of Gorsuch et al. (US 6,388,999 B1).

Regarding claim 4 Raitola teaches a device as recited in claim 1 except for sending a coherent channel description as a message from the base station to the subscriber station, wherein an uplink and downlink channel are described one after another. Raitola does teach sending a coherent channel description that can describe a plurality of channels (see col. 11, lines 1-3 & 7-10). Gorsuch teaches sending coherent channel assignment information from the base station to the subscriber station, wherein an uplink channel and a downlink channel are described one after the other (see col. 7, lines 40-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include sending a coherent channel description as a message from the base station to the subscriber station, wherein an uplink and downlink channel are described one after another because this would allow for a more efficient method of channel allocation that compensates for expansion and contraction of data traffic loading.

Regarding claim 5 Raitola teaches a device as recited in claim 1 except for sending an uplink channel and a downlink channel as separate messages from the base station to the

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subscriber station. Gorsuch teaches sending an uplink channel and a downlink channel as separate communications from the base station to the subscriber station (see col. 5, lines 26-33). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include sending an uplink channel and a downlink channel as separate messages from the base station to the subscriber station because this would allow for a more efficient method of channel allocation that compensates for expansion and contraction of data traffic loading.

Regarding claim 6 Raitola teaches a device as recited in claim 1 except for sending an uplink channel and a downlink channel in a common channel description as a message, the message having a flag indicating parts of the description which relate to the uplink channel and to the downlink channel. Raitola does teach sending a coherent channel description that can describe a plurality of channels (see col. 11, lines 1-3 & 7-10). Gorsuch teaches an urgency factor indicating the need to transmit data and based upon the urgency factor sending an uplink and a downlink channel description (see col. 7, lines 34-46, urgency factor reads on flag). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include sending an uplink channel and a downlink channel in a common channel description as a message, the message having a flag indicating parts of the description which relate to the uplink channel and to the downlink channel because this would allow for a more efficient method of channel allocation that compensates for expansion and contraction of data traffic loading.

Response to Arguments

IV. Applicant's arguments filed 07/24/2009 and 08/10/2009 have been fully considered but they are not persuasive.

Regarding claims 1 and 8 Raitola teaches a device as claimed.

Applicant argues that Raitola does not disclose that the order channel carries any information relating to the order (sequence) of the usage of assigned channel resources by a single subscriber station.

First, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a channel description carrying information relating to the order (sequence) of the usage of assigned channel resources) are not recited in the rejected claim(s).

Second, Raitola does teach a common channel description with information relating to the utilization of the plurality of channel resources by a single subscriber station (see col. 11, lines 1-3). The order channel describing which transmission units to transmit and which transmission channel to transmit on reads on information relating to the utilization of channel resources as claimed.

Applicant also argues that in Raitola, no common channel description is transmitted that identifies a plurality of channels that are assigned for a specific transmission.

First, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a common channel description transmitted that identifies a plurality of channels) are not recited in the rejected claim(s).

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Second, Raitola does teach a common channel description identifying a plurality of channel resources that are assigned for a specific transmission (see col. 11, lines 1-3). Assigning which transmission units to transmit and which TCH the subscriber can transmit on reads on assigning a plurality of channel resources as claimed.

Finally, applicant states, at least on page 5 and page 8, that “according to the specification, in a case where, for example, more than only one physical channel is to be provided to the user for the purpose of real-time data transmission in one direction, the order in which the channels are to be used is unambiguously specified in the channel description in a further embodiment.”

In response this argument that the references fail to show certain features of applicant’s invention, it is noted that the features upon which applicant relies (i.e., in a case where, for example, more than only one physical channel is to be provided to the user for the purpose of real-time data transmission in one direction, the order in which the channels are to be used is unambiguously specified in the channel description) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

V. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRANDON J. MILLER whose telephone number is (571)272-7869. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/
Supervisory Patent Examiner, Art Unit 2617

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